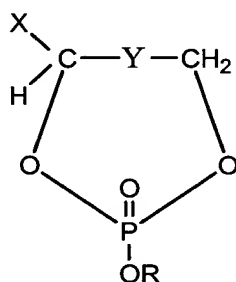


Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for inducing promotion of neural cell differentiation of target cells in a subject having a neurodegenerative disorder, comprising contacting said target cells for a suitable period of time with an effective amount of a compound of the general Formula I



wherein

Y is  $-(CH_2)_m-$ ,  $-CH(OH)-$  or  $-C(=O)-$  and m is  $[[0-3]]$  1-3;

X is H, alkyl,  $-CH_2OH-$ ,  $CH_2Oacyl$  or  $-CH_2acyl$ ; and

R is H, a cation, alkyl or optionally substituted aryl.

2. (Currently Amended) A method for promoting neural activity in an individual having a neurodegenerative disorder, comprising

\_\_\_\_\_ administering to the individual in need an effective amount of a compound of the general Formula I of Claim 1.

3. (Previously Presented) A method according to Claim 2, wherein said neural activity is selected from the group consisting of promotion of neuronal outgrowth, promotion of nerve growth, provision of dopaminotrophic supporting environment in a diseased portion of the brain and nerve rescue.

4. (Currently Amended) A method for the treatment of disorders and diseases which can be treated by promoting neural cell differentiation and/or neural activity in a subject having a neurodegenerative disorder, comprising \_\_\_\_\_ administering to a person in need a therapeutically effective amount of a compound of Formula I of Claim 1.

5. (Currently Amended) A method according to Claim 4, wherein said ~~disorders and diseases are mental disorders or diseases which are at least one of dementia mental disorders and neuro-degenerative disorders or diseases~~ is dementia.

6. (Currently Amended) A method according to Claim 4, wherein said ~~mental disorder or disease is~~ neuro-degenerative disorder is schizophrenia.

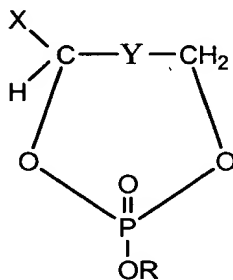
Claim 7. (Cancelled)

8. (Previously Presented) A method according to claim 1 wherein the compound of formula I is selected from the group consisting of

- i. 1,3 cyclic glycerophosphate;
- ii. phenyl 1,3 cyclic glycerophosphate;
- iii. 1,3 cyclic propanediol phosphate;
- iv. phenyl 1,3 cyclic propanediol phosphate;
- v. cyclic dihydroxyacetone phosphate; and
- vi. phenyl cyclic dihydroxyacetone phosphate.

Claims 9-16. (Cancelled).

17. (Currently Amended) A method for promoting neural activity in an individual having a neurodegenerative disorder, comprising \_\_\_\_\_ administering to the individual in need an effective amount of a compound of the general formula I



wherein

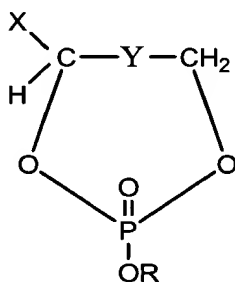
Y is  $-(CH_2)_m-$ ,  $-CH(OH)-$  or  $-C(=O)-$  and m is  $[[0-3;]]1-3$ ;

X is H, alkyl,  $-CH_2OH-$ ,  $CH_2Oacyl$  or  $-CH_2acyl$ ; and

R is H, a cation, alkyl or optionally substituted aryl;

wherein said neuronal activity is selected from the group consisting of promotion of neuronal outgrowth, promotion of nerve growth, provision of dopaminotrophic supporting environment in a diseased portion of the brain and nerve rescue.

18. (Currently Amended) A method for the treatment of a neurodegenerative disorders and diseases disorder or disease, other than dementia, which can be treated by promoting neural cell differentiation and/or neural activity, the method comprising administering to a person in need a therapeutically effective amount of a compound of Formula I



wherein

Y is  $-(CH_2)_m-$ ,  $-CH(OH)-$  or  $-C(=O)-$ , and m is  $[[0-3]]$  1-3;

X is H, alkyl,  $-CH_2OH-$ ,  $CH_2Oacyl$  or  $-CH_2acyl$ ; and

R is H, a cation, alkyl or optionally substituted aryl.

Claim 19. (Cancelled).

20. (Currently Amended) A method according to claim 18 , wherein said ~~mental disorder or disease is~~ neuro-degenerative disorder is schizophrenia.

21. (Previously Presented) A method according to Claim 18 , wherein said ~~mental disorder is~~ neuro-degenerative disorder is a learning disability.

Claim 22. (Cancelled).

23. (Previously Presented) A method according to Claim 18, wherein said neurodegenerative disorder or disease is Alzheimer's disease or Parkinson's disease.

24. (Currently Amended) A method according to Claim 18, wherein said neuro degenerative disorders or diseases disorder or disease result results from exposure of an individual to harmful environmental factors or from a mechanical injury.

25. (Currently Amended) A method according to Claim 18, for the treatment of nerve rescue after a neuro- degenerative nerve injury.

26. (Currently Amended) A method according to claim 18 ~~where~~ wherein the compound of the general formula I is selected from the group consisting of

- i. 1,3 cyclic glycerophosphate;
- ii. phenyl 1,3 cyclic glycerophosphate-P;

- iii. 1,3 cyclic propanediol phosphate;
- iv. phenyl 1,3 cyclic propanediol phosphate;
- v. cyclic dihydroxyacetone phosphate; and
- vi. phenyl cyclic dihydroxyacetone phosphate.

Claims 27-37. (Cancelled).